

## CLAIMS

1. A modifier for hydrocarbon polymer comprising, as an active component, a modified cyclic structure-containing conjugated diene polymer wherein an amount of an  $\alpha,\beta$ -ethylenically unsaturated carboxylic acid compound bonded by addition is from 0.1 to 20% by weight and a cyclization ratio is from 30 to 95%.
2. The modifier for hydrocarbon polymer according to claim 1, wherein a weight average molecular weight of the modified cyclic structure-containing conjugated diene polymer is from 5,000 to 600,000 as measured by gel permeation chromatography and expressed in terms of that of polystyrene.
3. The modifier for hydrocarbon polymer according to claim 1 or 2, which contains 1 to 100% by weight of the modified cyclic structure-containing conjugated diene polymer.
4. The modifier for hydrocarbon polymer according to any one of claims 1 to 3, wherein the modified cyclic structure-containing conjugated diene polymer is obtained by an addition reaction of a cyclized product, which is obtained by an internal cyclization reaction of a conjugated diene polymer, with an  $\alpha,\beta$ -ethylenically unsaturated carboxylic acid compound, or obtained by an internal cyclization reaction of an addition reaction product which is obtained by adding an  $\alpha,\beta$ -ethylenically unsaturated carboxylic acid compound to a

conjugated diene polymer.

5. The modifier for hydrocarbon polymer according to claim 4, wherein the conjugated diene polymer contains 70% or more by weight of a conjugated diene monomer unit.

6. The modifier for hydrocarbon polymer according to claim 5, wherein the conjugated diene monomer is 1,3-butadiene or isoprene.

7. The modifier for hydrocarbon polymer according to claim 5, wherein the conjugated diene monomer is isoprene.

8. A hydrocarbon polymer composition comprising a hydrocarbon polymer and the modifier for hydrocarbon polymer according to claim 1.

9. The hydrocarbon polymer composition according to claim 8, comprising 100 parts by weight of a hydrocarbon polymer and 0.01 to 50 parts by weight of a modified cyclic structure-containing conjugated diene polymer.

10. The hydrocarbon polymer composition according to claim 8 or 9, wherein the hydrocarbon polymer contains 70% by weight of a hydrocarbon monomer unit.

11. The hydrocarbon polymer composition according to claim

8 or 9, wherein the hydrocarbon polymer is a polyolefin-based resin or a polyolefin-based rubber.

12. A molding comprising the hydrocarbon polymer composition according to claim 8.

13. The molding according to claim 12, which is coated with a covering material.

14. The molding according to claim 13, wherein the covering material is a coating material.